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Mineral Industry Surveys

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ANTIMONY IN THE FIRST QUARTER 2003

The price of antimony metal remained fairly steady during the first quarter of 2003. The New York dealer price, published by Platts Metals Week, started the quarter at $1.25 - $1.35 per pound. The lowest price during the quarter was $1.18 - $1.25 per pound in early February. The price finished the quarter at $1.25 - $1.32 per pound.

In China, the Yiyang Basan Antimony Product Works announced plans to reduce its antimony trioxide output to 1,500 metric tons (t) in 2003 from 2,500 t in 2002 due to depleting resources. Officials complain that costs for exploitation are rising and that they prefer to lower output. In response, the company produced about 1,000 t of antimony ingot in 2002 (Platts Metals Week, 2003a).

Also in China, the Longlin Antimony Works in Guangxi Province plans to increase its production of antimony metal to about 2,000 t in 2003 from 1,700 t in 2002. The company increased its capacity to 4,000 t in 2002 from 3,000 t in 2001. Longlin exports mainly to Japan, Republic of Korea, and the United States (Platts Metals Week, 2003b).

In Australia, the Hillgrove gold and antimony mine east of Armidale, New South Wales (NSW), has been reopened by its new owners. Early in 2002, the mine was placed in the hands of receivers as its owner, Malaysia Mining Corp., encountered mounting debt. New England Gold Proprietary Ltd., based in Newcastle, NSW purchased the mine and is preparing for a resumption of production. The company is seeking permission from the NSW government to build new tailings facility at the mine. Antimony in NSW is derived solely from the antimony concentrates at Hillgrove. When the mine was operating, all of its production was exported, with most probably going to China. In 2001, only 1,250 t of contained antimony was produced (Metal-Pages 2003c§[1]).

Also in Australia, the antimony and gold exploration company, A.G.D. Mining Ltd., announced results from its new Costerfield project in central Victoria. Geochemical sampling within and outside the mineralized corridor at Costerfield has outlined four additional exploration targets for antimony/gold mineralization. The new discovery would contribute to the project's existing resource base of 290,000 t, grading 12 grams of gold per t and 6.2% antimony (Metal-Pages, 2002§). Reports indicate that China, the world's largest antimony producer, is seeking antimony concentrates abroad as authorities continue to deal with the repercussions of the Nandan Mine disaster; explosions, still under investigation, led to many fatalities at the mine and its subsequent closure. Nandan, in southern Guangxi Province, is unlikely to reopen soon. The mine produced more than 100,000 t of antimony annually before the disaster. The loss of its output will reduce China's antimony production by about 40% in 2003. Officials predict China's 2003 antimony output will be less than 50,000 t (Metal-Pages, 2003a§).

At a minor metals conference held in Genoa, Italy, the current world antimony supply-demand situation was discussed. Annual world demand for antimony metal is about 110,000 t, and China accounts for 80,000 t of the demand. Due to floods and mine accidents in the past few years, sources of concentrate production in China have been lost. Thus, China has become a net importer of antimony concentrates—about 12,000 t in 2002. This year, China may produce about 50,000 t of metal and 35,000 t of trioxide. However, much of the metal output will be diverted to trioxide production, causing a shortfall in primary metal exports (Metal-Pages, 2003b§).

Nanxing Antimony Works, one of the largest antimony smelters in China's Guangxi Province, plans to halt production due to a lack of concentrates. Officials indicated that the smelter could restart in 2 months if the supply problem is resolved. Nanxing has a capacity of 20,000 t annually, but is currently only producing about 350 t monthly. Nanxing is also planning to produce antimony trioxide by building a new facility with a capacity of 8,000 t annually (Metal-Pages, 2003d§).

References Cited

Platts Metals Week, 2003a, Basan to cut antimony trioxide output: Platts Metals Week, v. 74, no. 3, January 20, p. 15.
Platts Metals Week, 2003b, China's Longlin to boost antimony output to 2,000 mt: Platts Metals Week, v. 74, no. 11, March 17, p. 14.

[1]References that include a section mark (§) are found in the Internet References Cited section.

Internet References Cited

Metal-Pages, 2002 (December 31), AGD finds more gold and antimony, accessed February 1, 2003, via URL http://www.metal-pages.com.

Metal-Pages, 2003a (March 17), China seeking antimony concentrate abroad, accessed March 18, 2003, via URL http://www.metal-pages.com.

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Metal-Pages, 2003d (April 9), Nanxing Antimony on brink of closure, accessed April 10, 2003, via URL http://www.metal-pages.com.

TABLE 1
SALIENT ANTIMONY STATISTICS[1]

(Metric tons, antimony content, unless otherwise specified)

	2002		2003
	Total[p]	Fourth quarter	First quarter
Production:			
Primary smelter[2]	W	W	W
Secondary	5,210	W	1,150
Imports for consumption:	28,500	8,610 [r]	5,640 [3]
Ore and concentrate	1,310	384 [r]	100 [3]
Metal	4,050	719 [r]	1,170 [3]
Oxide[4]	23,200	7,510 [r]	4,370 [3]
Exports:	10,300	1,580	597
Metal, alloys, and scrap (gross weight)	1,610	150	43
Oxide[4]	8,690	1,430	554
Consumption of primary antimony	12,700	2,770	3,180
Price: Average cents per pound[5]	353.00	135.25	119.82
Stocks, end of period[6]	21,900	5,650 [r]	5,650

[p]Preliminary. [r]Revised. W Withheld to avoid disclosing company proprietary data.
[1]Data are rounded to no more than three significant digits, except prices.
[2]Nearly all primary smelter output is antimony trioxide.
[3]Data for January and February only.
[4]Antimony content is calculated by the U.S. Geological Survey.
[5]New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.
[6]Producer and consumer stocks.

TABLE 2
INDUSTRY STOCKS OF PRIMARY ANTIMONY
IN THE UNITED STATES[1]

(Metric tons, antimony content)

	2002	2003[2]
Class of material	Fourth quarter	First quarter
Metal	745 [r]	726
Oxide	4,650 [r]	4,670
Other[3]	250	247
Total	5,650 [r]	5,650

[r]Revised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who held 90% of the total stocks of antimony at the end of 2002.
[3]Includes ore and concentrate, sulfide, and residues.

TABLE 3
INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY[1, 2]

(Metric tons, antimony content)

Class of material consumed	2002		2003[2]
	Total[p]	Fourth quarter	First quarter
Metal	W	W	W
Oxide	10,800	2,320	2,560
Other[3]	1,960	448	617
Total	12,700	2,770	3,180

[p]Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Other."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who consumed 69% of the total antimony in 2002.
[3]Includes ores and concentrates, sulfide, and residues.

TABLE 4
REPORTED CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED[1]

(Metric tons, antimony content)

Product	2002		2003[2]
	Total[p]	Fourth quarter	First quarter
Metal:			
Bearing metals and bearings	W	W	W
Other[3]	3,240	712	921
Total	3,240	712	921
Nonmetal:			
Ceramics and glass	W	W	W
Plastics	W	W	W
Other[4]	3,070	811	793
Total	3,070	811	793
Flame-retardants:			
Plastics	2,420	594	608
Other[5]	4,020	651	857
Total	6,440	1,250	1,460
Total reported	12,700	2,770	3,180

[p]Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Other."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who consumed 69% of the total antimony in 2002.
[3]Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.
[4]Includes ammunition primers, pigments, ceramics and glass, and plastics.
[5]Includes adhesives, pigments, rubber, and textiles.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY[1]

(Metric tons, antimony content)

	2002			2003		
Class and country	Total[p, 2]	December	Fourth quarter	January	February	January-February
Ore and concentrate:						
China	715	140	160	40	17	57
Other	597	67	224	19	24	43
Total	1,310	206	384	58	42	100
Metal:						
China	2,590	108	397	751	225	976
Hong Kong	92	--	--	--	--	--
Mexico	880	--	186	--	16	16
Peru	285	--	54	--	91	91
Other	62	48	82	68	19	88
Total	4,050	156	719	819	352	1,170
Oxide:						
Belgium	3,060	242	609	175	239	414
China	8,430	1,670	3,810	1,250	612	1,860
Hong Kong	798	167	266	332	--	332
Mexico	8,110	675	2,060	745	774	1,520
South Africa	2,620	327	711	195	--	195
Other	178	32	50	13	35	48
Total	23,200	3,120	7,510	2,710	1,660	4,370
Grand total	28,500	3,480	8,610	3,580	2,050	5,640
Other antimony compounds (gross weight)	101	44	1	--	--	1

[p]Preliminary. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes revisions to prior months data.

Source: U.S. Census Bureau. Antimony content is calculated by the U.S. Geological Survey.